



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,904	02/11/2005	Philippe Vincent	12400-015	1396
757 7590 07/20/2007 BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610			EXAMINER CULBRETH, ERIC D	
			ART UNIT 3616	PAPER NUMBER
			MAIL DATE 07/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/500,904	VINCENT ET AL.	
	Examiner	Art Unit	
	Eric Culbreth	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/26/05 & 8/6/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

(Regarding changing the address of the first inventor.)

Drawings

2. The drawings are objected to because of the following informalities. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

Art Unit: 3616

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

a. Regarding Figure 2, the lead line for reference numeral 2 should touch the track or have an arrow (note paragraph [0037]).

b. Contrary to paragraph [0037], line 4 the lead line for reference numeral 26 in the replacement drawing does not touch an inwardly directed lip.

c. Regarding paragraph [0043], lines 4-5 controller 42 is not illustrated as connected to inter-face 43 in Figure 3.

d. Regarding paragraph [0045], next to last line, reference numeral 62's lead line does not touch the squib.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the weight sensor of claim 5 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: In paragraph [0007], lines 1-3 of the substitute specification filed 7/2/04, there is an incomplete sentence.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. In claim 1, the recitation of a communication channel is a double inclusion of one of the first and second systems for providing a signal (i.e. claim 1 would appear

Art Unit: 3616

to be reciting a communication channel in addition to the first and second system when in actuality, as claimed in claim 2, the first system is the communication channel).

b. In claim 3, the recitation of an air-bag "or" a safety-belt pre-tensioner is an indefinite alternative recitation, failing to positively recite structure.

c. In claim 7, it is not clear what is included by the recitation of a "passive" arrangement (when is this limitation infringed).

d. In claim 8, "micro-switch" is indefinite (what defines "micro-", and when is it infringed).

e. In claim 18, lines 2-3 "at least one elongate track units" should be "at least one elongate track unit".

f. Also in claim 18, there is no antecedent basis for "at least one of the communication channels" (claim 1 only recited a communication channel).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 3616

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-4, 6-7, and 14-18 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over UK Patent 2,327,914 (cited by applicant) in view of Hawes et al US005838233A.

UK '914 discloses a safety arrangement in a motor vehicle comprising a removably mounted seat 1 (page 18, second paragraph) having a safety device 4 (a pretensioner or airbag in the next to line of the abstract, regarding claim 3) adapted to be actuated in the event that an accident should occur, and a wireless communication channel having a first part (antennas 9) on the vehicle rails (claim 18) and a second part (antennas 10) on the vehicle seat providing communication between a control unit (generator 12) to the safety element 4 on the seat (page 8, second paragraph). As indefinitely recited, there is a first system (antennas 9, 10) for providing a signal to the control unit when the seat is present in the vehicle (lines 4-5 of the abstract, where there are means to supply a signal to a transmitting antenna on the rail of the vehicle to transfer power to a receiving antenna on the seat, which would involve the generator 12, which is the control unit). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify UK '914 to include a second system separate from the seat part of the communication channel for determining the presence of the seat in the vehicle and providing a signal indicative of the presence of the seat in

Art Unit: 3616

the vehicle to the control unit as taught by Hawes et al's tags 30 and 34 with different frequencies (column 2, lines 53-56) in order to give a redundant positive indication of the presence and orientation of the seat (column 3, lines 55-61)(claim 1). In UK '914, the first system is constituted by the communication channel (claim 2). The safety device on the seat in Figure 8 of UK '914 has a diagnostic sensor 83 adapted to pass a signal to the control unit on the vehicle through the communication sensor (page 17, last paragraph, where coded signals are passed from the seat occupancy sensor to the seat modulator 84 and hence to the seat antennas 76 and onto the chassis antennas 72)(claim 4). The second system in the combination is a transmitter (a tag/antenna) or active system transmitting a signal from the seat to the control unit through a second communication channel when interrogated or sensed (claim 6). As indefinitely recited, in the combination the second system is a passive arrangement (a tag with a set resonance frequency) (claim 7). In UK '914, Figure 5, the communication channel includes inductive coils 9 and 16-18 (claim 14), and power is transferred from the vehicle to the seat through the coils (page 3, next to last paragraph)(claim 15). In Figure 8 of UK '914, charger 77 and capacitor 78 are a storage arrangement by which power may be stored in the seat when transferred (claim 16). In the combination, since Hawes et al teaches at column 3, lines 55-61 that the second tag 34 gives a positive indication of orientation of the seat for redundancy, and teaches at column 3, lines 33-36 that an alarm is activated if tags 30 and 34 indicate a dangerous situation, it would be obvious to the skilled to include an alarm generator if only one of the systems indicates a seat (i.e., to set off an alarm at any sign of abnormality) (claim 17).

10. Claim 5 as best understood is rejected under 35 U.S.C. 103(a) as being unpatentable over UK '914 in view of Hawes et al as applied to claim 1 above, and further in view of Handman et al US5696409, cited by applicant.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify UK '419 and Hawes et al to include a weight sensor in the seat in view of Handman et al's teaching at column 3, lines 32-37 to use a receiver system to transmit signals regarding the weight sensor along with signals regarding the pretensioner.

11. Claims 8-9 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over UK '914 in view of Hawes et al as applied to claim 7 above, and further in view of Holzapfel et al US005804887A (cited by applicant).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify UK '914 and Hawes et al to include a microswitch as best understood as the second system in view of Holzapfel et al's teaching at column 4, lines 40-45 of a mechanical switch (i.e., a small switch) when the seat is installed in order to use a manual, simple connection (claim 8) or to include the second system being a magnet and Hall effect or reed switch on the vehicle as taught by Holzapfel et al at column 4, lines 46-49 in order to use an alternative equivalent to the mechanical switch (claim 9).

Art Unit: 3616

12. Claims 10-13 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over UK '914 in view of Hawes et al as applied to claim 7 above, and further in view of Meister et al US005570903A.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify UK '914 and Hawes et al to include a light source illuminating a light responsive sensor or bar code on the seat in view of Meister et al's bar code 48 on the removable seat or reflector 42 on the seat in order to sense the presence of the seat using alternative equivalent structure in the art.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lane, Jr. 5,690,356 discloses mechanical switches that send indications to an air bag.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eric Culbreth
Primary Examiner
Art Unit 3616



ec

10/500904

Sheet 2/3

Approved
 EC 7/17/07

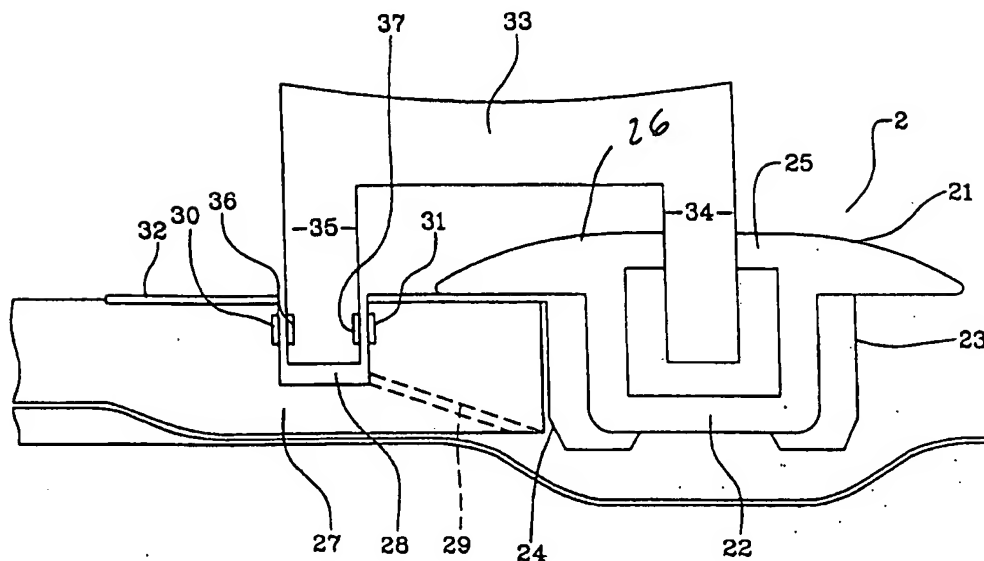


FIG. 2

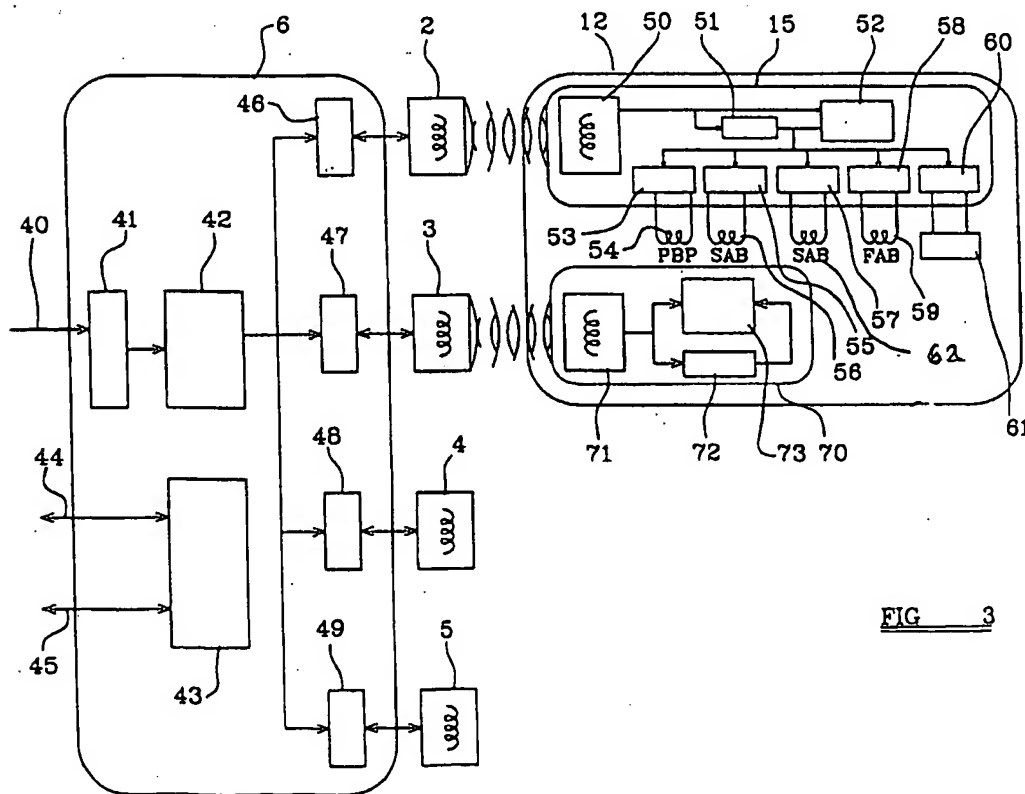


FIG. 3